

Application No. 09/787875  
After Final Office Action of March 1, 2006

Docket No.: 05587-00311-US

AMENDMENTS TO THE CLAIMS

1. cancelled
2. (Currently amended) The process for preparing a homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the melt flow index (MFR 190/15) is from 1.3 g/10 min to 10 g/10 min, the molecular weight distribution  $M_w/M_n$  is from 3 to 10, the bulk density is from 0.1 g/cc to 0.4 g/cc to 0.28 g/cc and the average particle size is from 20  $\mu\text{m}$  to 200  $\mu\text{m}$ .
3. (Currently amended) The process for preparing a homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the melt flow index (MFR 190/15) is from 1.4 g/10 min to 5 g/10 min, the molecular weight distribution  $M_w/M_n$  is from 4 to 8, the bulk density is from 0.13 g/cc to 0.3 g/cc to 0.28 g/cc and the average particle size is from 60  $\mu\text{m}$  to 180  $\mu\text{m}$ .
4. (Currently amended) The process for preparing a homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the melt flow index (MFR 190/15) is from 1.4 g/10 min to 3 g/10 min, the molecular weight distribution  $M_w/M_n$  is from 4 to 8, the bulk density is from 0.15 g/cc to 0.28 g/cc and the average particle size is from 60  $\mu\text{m}$  to 160  $\mu\text{m}$ .
5. (Currently amended) The process for preparing a homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the polymerization is carried out at a temperature of from 30°C to 130°C and a pressure of from 0.05 MPa to 4 MPa.

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6. (Currently amended) The process for preparing a homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the polymerization is carried out at a temperature of from 50°C to 90°C.
7. (Currently amended) The process for preparing an ethylene homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the concentrations of the reactants in the starting solutions in the preparation of the mixed catalyst are from 0.1 mol to 9.1 mol of Ti(IV) compound/l of solvent and from 0.01 mol to 1 mol of Al compound/l.
- 8-12. (cancelled)
13. (Currently amended) The process as claimed in ~~claim 1~~ claim 16, wherein reacting said Ti(IV) compound with said organic aluminum compound is at a from the temperature is from 0 to 30°C from 1 to 30 minutes.
14. (Currently amended) The process for preparing a homopolymer or copolymer as claimed in ~~claim 1~~ claim 16, wherein the polymerization is carried out at a temperature of from 50°C to 90°C and a pressure of from 0.02 MPa to 2 MPa.
15. (previously presented) The process for preparing a homopolymer or copolymer as claimed in claim 14, wherein the pressure is from 0.04 MPa to 1 MPa.
16. (previously presented) A process for preparing a homopolymer or copolymer having a melt flow index (MFR 190/15) of from 1.3 g/10 min to 10 g/10 min, a molecular weight distribution  $M_w/M_n$  of from 3 to 30, a bulk density of from 0.05 g/cc to 0.28 g/cc and an average particle size of from 5 μm to 300 μm which consists of polymerizing a monomer

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using a mixed catalyst prepared by reacting a Ti(IV) compound with an organic aluminum compound at from -20°C to 50°C in a suspension medium for from 0.5 minute to 60 minutes.

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